

work. Rat Portage, Lake of the Woods, Rainy River—by this circuitous route we were obliged to reach our destination on Rainy Lake. Our object was to examine specially the gold fields of the region, and also incidentally to note anything that appeared to indicate other mineral resources of importance.

The only map of the district we were able to examine is one made by Lawson and published by the Dominion Geological Survey in connection with his report on the Rainy Lake region. It is an admirable map, and I found it in constant use by prospectors, steamboat captains and all others. Even the Americans who came there had to depend upon the Canadian map, which shows part of the American territory as well. I found I could steer my course by this map; all the portages, channels, etc., are marked upon it, and I could practically go into an unknown country without a guide, and make my way by the aid of this map alone. The topographical work of the map is admirably done, and the geological work in the lower part of the region is quite as admirable. I found a few places, however, here and there where blunders had been made in the geology, especially in marking the contours of the various formations.

This whole region consists of two great groups of rocks—Laurentian and Huronian. On the map the Laurentian rocks are colored pink, and the Huronian green. The special rock which is of interest to us is the green one, called by Lawson the Keewatin, in reality a member of the Huronian series, so far as one can judge from its general associations. The other rocks are Laurentian granite, gneiss, and rocks of a similar description. For several reasons this region is one of the most interesting in the world from a geological point of view. I shall give you one. We find the gneissoid Laurentian rocks not generally looked on as eruptive, coming up through the green Huronian schists, which at one time probably formed a great sheet, covering all the rocks beneath. These Laurentian bosses are thus enfolded between the schists, and in consequence wherever you go in that region you find the latter nearly perpendicular, a fact of great importance to the district as a mining one. These green rocks—green on the ground as well as on the map—have proved to be the most interesting from the mineralogical standpoint. They consist of hornblende schists, chlorite schists, and a mixture of these and a number of associated rocks. In many parts these schists